REMARKS

In view of the above amendments and the following remarks, reconsideration of the rejections and objections, and further examination are requested.

Claims 34-65 are pending in this application. Claims 34, 36, 40, 41, 43-50, 52, 56, 57 and 63-65 stand rejected, and claims 35, 37-39, 42, 51 and 53-55 have been indicated as containing allowable subject matter. Claims 34-65 are amended herein. No new matter has been added.

The Applicants greatly appreciate the Examiner's indication that claims 35, 37-39, 42, 51 and 53-55 contain allowable subject matter and would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

During a review of the Office Action, it was discovered that claims 58-62 did not appear to be addressed. The Applicants would like to thank the Examiner for discussing the status of claims 58-62 with the Applicants' representative. During the discussion, the Examiner indicated that claims 58-62 should have been treated similar to claims 42-46. That is, claim 58 should have been indicated as containing allowable subject matter, and claims 59-62 should have been rejected on the same grounds as claims 43-46.

The Examiner objected to the drawings on the basis that Figures 43-44 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated.

The Applicants would like to remind the Examiner that formal replacement drawings for Figures 43-46 were submitted on April 12, 2005, that labeled each of Figures 43-46 as "Prior Art."

Accordingly, the Applicants respectfully request that the objection to Figures 43 and 44 be withdrawn.

The specification and abstract have been carefully reviewed and revised to make grammatical and idiomatic improvements in order to aid the Examiner in further consideration of the application. Amendments to the specification are contained herein. Moreover, a substitute Abstract including revisions has been prepared and is submitted herewith. Also submitted herewith is a marked-up copy of the Abstract indicating the changes incorporated therein. No new matter has been added.

The claims are rejected as detailed below.

Claims 34, 40, 48-50, 56, 64 and 65 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over the Applicants' admitted prior art.

Claims 36, 41, 43-47, 52, 57 and 63 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over Applicants' admitted prior art in view of Olsen (U.S. Patent No. 5,771,462) (hereinafter referred to as "Olsen"). Although claims 59-62 were not included in the recitation of the rejection, as discussed above, they are to be included in this rejection.

Independent claims 34, 49, 50 and 65 have been amended to distinguish over the references cited by the Examiner.

The above rejections are submitted to be inapplicable to the amended claims for the following reasons.

Claim 34 recites a wireless communication system including, in part, at least one relay apparatus connected with a control apparatus via an optical transmission path, wherein the relay apparatus comprises a level control section for attenuating a level of a downstream electrical signal to narrow a communicable area of the at least one relay apparatus and to allow a level of a wireless signal transmitted by a wireless communication terminal existing in the communicable area to be within a predetermined range.

Consequently, the wireless communication system of the present invention (1) maintains levels of wireless signals received by the relay apparatus from the control apparatus within a predetermined range, (2) keeps the leakage ratio of wireless signals within a certain level or lower, and (3) keeps a D/U (Desired/Undesired) ratio of a wireless signal received by the relay apparatus at a certain level or higher. As a result, wireless LAN signals of a plurality of channels can be used for communication in one area without being jammed by a signal from another channel.

In contrast to the present invention, the Applicants Admitted Prior Art does not disclose a relay apparatus including a level control section for attenuating a level of a downstream electric signal. Instead, Applicants Admitted Prior Art discloses a relay apparatus 28 that receives an upstream signal from a wireless communication terminal, amplifies the received signal, divides and frequency-converts the amplified signal, amplifies the frequency-converted signals, and converts the thus amplified signals into an optical signal (see page 4, line 15 to page 5, line 1).

The Applicants' Admitted Prior Art is able to (1) maintain the levels of wireless signals received by the relay apparatus from a control apparatus within a predetermined range, and (2) keep the leakage ratio of wireless signals within a certain level or lower. However, the Applicants' Admitted Prior Art does not also (3) keep a D/U (Desired/Undesired) ratio of a wireless signal received by the relay apparatus at a certain level or higher (see page 13, lines 11-13). Thus, the Applicants' Admitted Prior Art is not able to prevent jamming for communication in one area by a signal from another channel.

Moreover, there is no disclosure or suggestion in the Applicants' Admitted Prior Art to provide a level control section in the relay apparatus to attenuate the level of a downstream signal. In other words, the Applicants' Admitted Prior Art does not disclose *a relay apparatus that comprises a level control section for attenuating a level of a downstream electrical signal to narrow a communicable area of the relay apparatus and to allow a level of a wireless signal transmitted by a wireless communication terminal existing in the communicable area to be within a predetermined range.*

For at least the reasons discussed above, it is believed clear that the Applicants' Admitted Prior Art fails to disclose or suggest the present invention as recited in claim 34.

Regarding the combination of the Applicants' Admitted Prior Art and Olsen, Olsen is relied upon in the rejection as disclosing a signal dividing section, provided in the control apparatus, for dividing the downstream electric signal. The signal dividing section divides the downstream electric signal and thus attenuates the level of the downstream electric signal so as to narrow a communicable area of the relay apparatus, and thus allows the level of a wireless signal transmitted by a wireless communication terminal existing in the communicable area to be within the predetermined range, and the first optical transmitting sections convert the downstream electric signals divided by the signal dividing section into downstream optical signals.

In contrast to the present invention, Olsen does not disclose a relay apparatus including a level control section for attenuating a level of a downstream electric signal. Instead, Olsen discloses that by introducing appropriate delays in signals being transmitted from a base station to a number of transceivers which transmit data to wireless units and by selecting uplink signals to be received by the base station, a physical coverage area can be increased by a factor of, for example, 10. Figure 1b shows a wireless infrastructure including transceivers (TRX) that are

each connected to a signal selector and delay units (SSDU) through cables 51-56. The SSDUs perform a selection function in an uplink allowing only one TRX unit at a time to transmit a received signal to an access point AP, and it performs a delay function in the downlink ensuring that signals are transmitted into subcells in a synchronized fashion. Olsen also discloses implementing an alert scheme over a shared wireless channel (see col. 10, lines 23-25).

Moreover, there is no disclosure or suggestion in Olsen to provide a level control section in a relay apparatus to attenuate the level of a downstream signal. In other words, the Olsen does not disclose *a relay apparatus that comprises a level control section for attenuating a level of a downstream electrical signal to narrow a communicable area of the relay apparatus and to allow a level of a wireless signal transmitted by a wireless communication terminal existing in the communicable area to be within a predetermined range.*

Regarding claims 49, 50 and 65, they are patentable over the references relied upon in the rejections for reasons similar to those set forth above in support of claim 34. That is, each of claims 49, 50 and 65 similarly recite *a relay apparatus including a level control section for attenuating a level of the downstream electric signal so as to narrow a communicable area of the relay apparatus and to allow a level of a wireless signal transmitted by the wireless communication terminal existing in the communicable area to be within a predetermined range.*

For at least the reasons set forth above, it is respectfully submitted that the above-discussed features as recited in claims 34, 40, 50 and 65 are not disclosed in the references applied by the Examiner. Furthermore, it is respectfully submitted that one of ordinary skill in the art at the time the invention was made would not have modified the Applicants' Admitted Prior Art in such a manner as to result in, or otherwise render obvious, the invention of claims 34, 49, 50 and 65. Therefore, it is respectfully submitted that claim 34 and claims 35-48 depending therefrom, claim 49, claim 50 and claims 51-64 depending therefrom, and claim 65 are clearly allowable.

In view of the foregoing amendments and remarks, all of the claims now active in this application are believed to be in condition for allowance. Reconsideration and favorable action are respectfully solicited.

Should the Examiner believe there are any remaining issues that must be resolved before this application can be passed to issue, it is respectfully requested that the Examiner contact the undersigned by telephone in order to resolve such issues.

Respectfully submitted,

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